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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/236,995	01/26/1999	PRAMOD MAHAJAN	5718-34	9734

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ALSTON & BIRD LLP  
PIONEER HI-BRED INTERNATIONAL, INC.  
BANK OF AMERICA PLAZA  
101 SOUTH TYRON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

KATCHEVES, KONSTANTINA T

ART UNIT

PAPER NUMBER

1636

DATE MAILED: 02/26/2003

22

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/236,995	MAHAJAN ET AL.
	Examiner Konstantina Katcheves	Art Unit 1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 16 December 2002.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-33 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 1-23 is/are allowed.

6) Claim(s) 24-33 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**DETAILED ACTION**

Claims 1-33 are pending in the present application.

***Response to Amendment***

Claims 24 and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Accession No. AJ222589 (Babiyachuk et al. 19 November 1997) in view of Ikejima et al. al (cited by Applicant) for the reasons of record set forth in the Office action mailed 11 September 2002.

Claims 24-33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Accession No:AJ222589 and Ikejima et al. as applied to claims 24 and 25 above, and further in view of DeBlock (WO 97/06267) for the reasons of record set forth in the Office action mailed 11 September 2002.

The rejection of claims 1-23 have been withdrawn in view of Applicant's arguments.

***Response to Arguments***

Claims 24 and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Accession No. AJ222589 (Babiyachuk et al. 19 November 1997) in view of Ikejima et al.

Claims 24-33 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over Accession No:AJ222589 and Ikejima et al. as applied to claims 24 and 25 above, and further in view of DeBlock (WO 97/06267). Because Applicant has responded to both rejection on the same grounds, both rejections will be addressed in combination below.

Applicant argues that AJ222589 (Babiyachuk et al.) lacks two amino acids found within the second functional zinc fingers and that Ikejima teaches that poly(ADP-ribose) polymerase

(PARP) that lack one of two zinc fingers lack enzymatic activity. First, Applicant should note that the present claims recite an isolated DNA molecule comprising a sequence having at least 90% sequence identity. The sequence of AJ222589 has 95% sequence identity with the present sequence. Second, Applicant is reminded that the classic zinc finger motif of poly-ADP-ribose polymerase comprises Cys-X<sub>2</sub>-Cys-X<sub>28-30</sub>-His-X<sub>2</sub>-Cys. Although AJ222589 fails to contain a necessary component of the zinc finger motif, the motif was known in the art such that one of skill in the art would have motivated to modify the sequence of AJ222589 so that it would now contain two functional motif and provide for a functional PARP. Ikejima et al. establish the functional relevance of the zinc fingers and teach that deletion or mutation of the classic zinc finger domain eliminates the ability of poly ADP ribose polymerase to bind DNA. Therefore, Ikejima implicitly teaches one of skill in the art to provide for two functional zinc finger domains in order to provide a protein with enzymatic activity. Bibyachuk et al., which disclose that the AJ222589 sequence, show a well conserved DNA binding domain comprising two zinc fingers. See page 637. Given the state of the art as disclosed by Applicant in their response filed 27 June 2002 that the classic structure of a zinc finger domain is well known and the teachings of Ikejima, one of ordinary skill in the art would be sufficiently motivated to modify the sequence claimed by altering the zinc finger domain of AJ222589 to provide for two functional zinc fingers and thus a functional enzyme.

***Allowable Subject Matter***

Claims 1-23 are found allowable.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Konstantina Katcheves whose telephone number is (703) 305-1999. The examiner can normally be reached on Monday through Friday 7:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel, Ph.D. can be reached on (703) 305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 305-7939 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3388.

Konstantina Katcheves  
February 21, 2003

*Remy Yucel*  
REMY YUCEL, PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600